



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Atty. Docket

ERIC COHEN-SOLAL ET AL

US0000015

Serial No. 09/488,028

Group Art Unit: 2173

Filed: JANUARY 20, 2000

Examiner: T. HAILU

TITLE: MULTI-MODAL VIDEO TARGET ACQUISITION AND RE-DIRECTION
SYSTEM AND METHOD

Mail Stop: Amendment
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

REPLY UNDER 37 C.F.R. 1.111

Sir:

This responds to the Office Action of September 9, 2004.

Claims 1, 2, 4 and 6-15 are pending in the Application. In light of the following remarks, reconsideration and allowance of the application is respectfully requested.

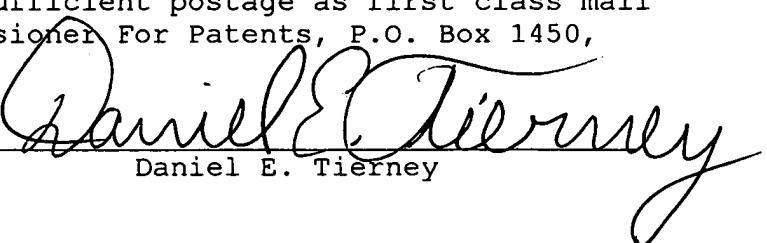
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On Dec. 3, 2004

By

Daniel E. Tierney



Turning to the Office Action, Claims 1, 2, 4, 6, 7 and 13-15 were rejected under 35 U.S.C. §103(a) as unpatentable over "The IntelliMedia WorkBench A Generic Environment For Multimodal Systems", by Brondsted et al. in view of "Combining Audio and Video in Perceptive Spaces", by Wren et al.¹ (Office Action ¶4) Claims 8-10 were rejected under 35 U.S.C. §103(a) as unpatentable over Brondsted in view of Wren and further in view of "Toward Natural Gesture/Speech HCI: A Case Study Of Weather Narration" by Poddar et al. (Office Action ¶5) Claim 12 was allowed and Claim 11 was acknowledged in the Office Action as including allowable subject matter. (Office Action, pp. 10-11)

The rejections of Claims 1, 2, 4, 6, 7 and 13-15 as unpatentable over Brondsted in view of Wren are considered first. Applicants maintain reliance on substantially the same distinctions as previously tendered (most recently in the Appeal Brief) with respect to Brondsted alone.

Among other things, Claim 1 recites "receiving additional external information that characterizes at least one machine-sensible feature of a target". The "additional external information" recited in Claim 1 is "additional" to sensing a

¹ It is noted that line 1 of paragraph 4 of the Office Action incorrectly includes allowed Claim 12 in the rejection.

triggering event that includes sensing a gesture indicating a direction of the target. Under appropriate circumstances, the "additional external information" recitation of Claim 1 may include speech input, for example. In such circumstances, the speech input "characterizes at least one machine-sensible feature of a target", among other recitations found in Claim 1.

The current Office Action maintains reliance on the spoken input of Brondsted for purportedly showing the Claim 1 recitation of "receiving additional external information that characterizes at least one machine-sensible feature of a target".² However, Applicants have pointed out, for example, that the speech input "Show me Hanne's office" (for the Campus Information System) and undefined spoken commands (for the Automatic Pool Trainer), do not characterize a machine-sensible feature of a target in Brondsted.³

² The Office Action alternatively cites to Brondsted's gesture input as providing the "receiving additional external information" recitation. (Office Action, p. 3, line 10) However, the Office Action fails to explain how Brondsted's pointing or other gestures might provide the sensing aspects of Claim 1 and teach or suggest the Claim 1 recitation of "receiving additional external information that characterizes at least one machine-sensible feature of a target".

³ Pages 9-10 of the Appeal Brief also distinguish in detail the use of speech input by the Domain Model of Section 3 of Bronsted from the Claim 1 recitation of "receiving additional external information that characterizes at least one machine-sensible feature of a target".

The "Response to Arguments" (Office Action ¶7) repeatedly states that Applicants have noted that the "additional external information" recitation of Claim 1 may include speech input. However, to qualify as "additional external information", such speech input must of course fall within the scope of the pertinent recitations of Claim 1. The final paragraph of the "Response to Arguments" appears to attempt most directly to address Applicants' arguments distinguishing Brondsted. The Examiner may be saying that Brondsted's spoken input "Hanne's office" characterizes Hanne's actual office, while the speech recognizer recognizes the spoken words. But there is no showing that Brondsted teaches or suggests that the words "Hanne" and/or "office" characterize a feature of a target on the campus map of Fig. 1 that is detected by a sensor, for example. Moreover, individual offices are not even visible (or otherwise evident) on the campus map of Fig. 1, nor is such a level of detail evident from the description of Fig. 1 in Section 2.1 of Bronsted.⁴

⁴ Although not taught or suggested by Bronsted, it is noted that under appropriate circumstances a name and/or the word "office" may characterize at least one machine-sensible feature of a target. For example, a hallway having a number of office doors marked with names that may be recognized via optical detection. In such context, speaking a name may fall within the scope of "receiving additional external information that characterizes at least one machine-sensible feature of a target". An analogous example was discussed in footnote 6 of the Appeal Brief.

Wren is only cited in the Office Action for purportedly showing the Claim 1 recitation of "aiming a camera in response to said sensing and said receiving step". (Office Action, ¶4 at pp. 3-4) It is noted that the Office Action cites certain speech input of Section 3.3 of Wren for the "receiving step" aspect of the Claim 1 "aiming" recitation. (Id.) However, the Office Action states that the user of Wren "points to a link (target of interest) and says 'there' to load a new URL page". (Id. at p. 3 (line 22) to p. 4 (line 1)) No assertion is made that saying the word "there" in this context characterizes a feature of the displayed link (and no assertion is made that any such feature would be "machine-sensible"). Nor is any assertion made regarding the other spoken words that Wren mentions in the context of the "City of News" of Section 3.3. Thus, there is also no showing or assertion that Wren provides the Claim 1 recitation of "receiving additional external information that characterizes at least one machine-sensible feature of a target".

Accordingly, the Office Action fails to show that Brondsted in view of Wren teaches or suggests the Claim 1 recitation of "receiving additional external information that characterizes at

least one machine-sensible feature of a target".⁵ For at least this reason, Brondsted in view of Wren fails to present a prima facie case of obviousness with respect to Claim 1 at least under MPEP 2143.03. Reconsideration and allowance of independent Claim 1 is respectfully requested. Independent Claim 13 includes recitations that provide analogous distinctions as discussed for Claim 1 and is distinguished from Brondsted in view of Wren for at least analogous reasons. Reconsideration and allowance of Claim 13 is respectfully requested.

As to independent Claim 14, Claim 14 does not include a recitation "receiving additional external information that characterizes at least one machine-sensible feature of a target" as in Claim 1. However, independent Claim 14 recites "inputting spatial information to indicate a position of a target", where the spatial information "includes sensing a gesture indicating a direction of said target". Claim 14 also recites "inputting further information about said target" which may, for example,

⁵ The "receiving additional external information that characterizes at least one machine-sensible feature of a target" recitation of Claim 1 is focused on above as not being taught or suggested by Brondsted in view of Wren. However, it follows that the Office Action also fails to show at least the Claim 1 recitation of "aiming a camera in response to said sensing and said receiving step" (emphasis added).

comprise speech input about the target.⁶ Claim 14 recites orienting an instrument with respect to the target to acquire the target in response to both the spatial and further information "to reduce an ambiguity in said position" of the target.

It is noted that nowhere in the rejection of Claim 14 does the Office Action even refer to the Claim 14 recitation "to reduce an ambiguity in said position". Applicants' primary argument regarding Claim 14 in the Appeal Brief (at pages 13-14) distinguished Brondsted from this aspect of Claim 14. Under these circumstances, it was vital for the Examiner to communicate the basis for this aspect of the rejection in the Office Action in order to promptly identify the issues. See MPEP 706.02(j).

However, as noted there is no assertion or showing in the Office Action that Brondsted teaches or suggests acquisition of a target on the campus map or pool table in response to input spatial information and input further information "to reduce an ambiguity in said position" of the target. Section 3.3 of Wren is cited in the Office Action for providing the Claim 14 recitation "orienting an instrument with respect to said target ... in response to said

⁶ The Office Action alternatively cites to Brondsted's gestures for the input "further information" in the rejection of Claim 14. Again, the Office Action fails to explain how Brondsted's pointing purportedly provides the input spatial information and its gestures purportedly teach or suggest "inputting further information about said target".

spatial information and said further information"⁷ (Office Action, pp. 7-8). But there is also no mention or showing of "to reduce an ambiguity in said position" of the target, as further recited in Claim 14. For example, the Office Action again states that the Wren user points to a target link and says "there" to load a new page, but the Office Action does not claim that these inputs serve to reduce an ambiguity in the position of the particular link.

Accordingly, neither Bronsted nor Wren is cited for teaching or suggesting at least the Claim 14 recitation of "orienting an instrument with respect to said target to acquire said target in response to said spatial information and said further information to reduce an ambiguity in said position". For at least this reason, the Office Action fails to present a *prima facie* case of obviousness with respect to Claim 14 at least under MPEP 2143.03. Reconsideration and allowance of independent Claim 14 is respectfully requested.⁸

⁷ It is noted that the Office Action omits the recitation "to acquire said target" that appears within the above-quoted portion of Claim 14. Applicants indicate where the omitted recitation appears by "..." above.

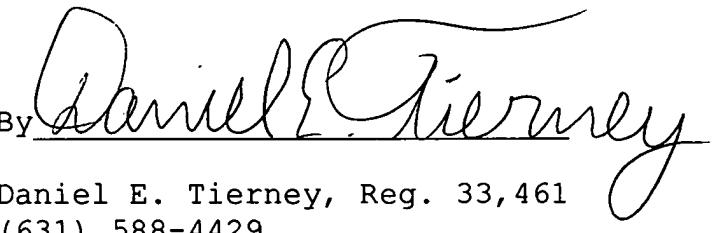
⁸ It is noted that independent Claim 13 also includes recitation "aiming a camera at said target in response to said indication and said further information to reduce an error in said aiming", and the Office Action fails to address the "to reduce an error in said aiming" recitation in the rejection. Thus, for analogous reasons Claim 13 is further distinguished from Brondsted in view of Wren.

Dependent Claims 2, 4, 6, 7 and 15 were also rejected in paragraph 4 of the Office Action as unpatentable over Brondsted in view of Wren. Without conceding the patentability per se of dependent Claims 2, 4, 6, 7 and 15, they are distinguishable from Brondsted in view of Wren at least by virtue of their dependency on their respective independent claim. Reconsideration and allowance of Claims 2, 4, 6, 7 and 15 is respectfully requested.

As noted above, dependent Claims 8-10 were rejected in paragraph 5 of the Office Action as unpatentable over Brondsted in view of Wren and further in view of Poddar. Poddar is not cited for curing any of the deficiencies of Brondsted and Wren described above with respect to independent Claim 1. Accordingly, without conceding the patentability per se of dependent Claims 8-10, the Office Action fails to present a prima facie case of obviousness with respect to Claims 8-10 at least by virtue of their dependencies on independent Claim 1. Reconsideration and allowance of Claims 8-10 is respectfully requested.

Applicants gratefully note that Claim 12 is allowed in the Office Action.⁹ (Office Action, pp. 10-11) Applicants also gratefully note the acknowledgement given in the Office Action that Claim 11 includes allowable subject matter.¹⁰ However, in view of the above remarks, it is submitted that all of the pending claims in the Application, namely Claims 1, 2, 4 and 6-15, are in shape for allowance. Accordingly, allowance is respectfully requested. Should the Examiner believe that a telephone conference would facilitate resolution of any remaining matters, the Examiner may contact Applicants' attorney at the number given below.

Respectfully submitted,

By 
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⁹ Applicants note that the Office Action does not rebut the deficiencies of Brondsted described on pages 11-13 of the Appeal Brief for independent Claim 12, and does not assert or demonstrate that Wren cures those noted deficiencies. To the extent not captured in the Examiner's basis for allowance, these additional reasons also provide bases for allowance of Claim 12. (Applicants note that there may, of course, be additional distinctions apart from those focused on in the Appeal Brief.)

¹⁰ While the allowability of Claim 11 in itself is accepted, Applicants of course assert that Claim 11 is also allowable at least by virtue of its dependency on independent Claim 1.